

System for Delivering Data Over a Network

Abstract

This invention describes a new method and system for delivering data over a
5 network to a large number of clients, which may be suitable for building large-scale
Video-on-Demand (VOD) systems. In current VOD systems, the client may suffer
from a long latency before starting to receive the requested data that is capable of
providing sufficient interactive functions, or the reverse, without significantly
increasing the network load. The method utilizes two groups of data streams, one
10 responsible for minimizing latency while the other one provides the required
interactive functions. In the anti-latency data group, uniform, or non-uniform or
hierarchical staggered stream intervals may be used. The system being realized based
on this invention may have a relatively small startup latency while users may enjoy
most of the interactive functions that are typical of video recorders including fast-
15 forward, forward-jump, and so on. Furthermore, this invention may also be able to
maintain the number of data streams, and therefore the bandwidth, required.